

CLAIMS

1. A pillow including a bottom member and a head placement member disposed above the bottom member, comprising:

a hollow portion formed in the head placement member designed so that when a head of a user is placed face-up on the head placement member, the head placement member is depressed by the load of the head so that the distance between the lowermost portion of the head on the head placement member and the bottom member is in the range of 10 mm to 30 mm; and

a biasing mechanism disposed in the hollow portion so as to bias the head placement member upward; wherein

the biasing mechanism comprises, provided the side on which a crown portion of the head of a user placed on the head placement member is referred to as a rear side and the side on which the neck of the user is placed is referred to as a front side, a pair of X-shaped links disposed laterally spaced apart in the hollow portion and each composed of a first link member slanted upward toward the front and a second link member slanted upward toward the rear which are connected pivotably via an intermediate pivotable connecting portion, a front-side upper connecting member for connecting front end portions of first link members of the pair of X-shaped links, a rear-side upper connecting member for connecting rear end portions of second link members of the pair of X-shaped links, and a spring member for providing a spring force for approximating the link members of each X-shaped link in the frontward/rearward direction along a line of action in

the frontward/rearward direction with respect to the X-shaped link, so that the pair of X-shaped links are biased toward the upper expanding direction via the spring member.

2. The pillow according to claim 1, wherein the pivotable connecting portion of the link members of each X-shaped link is disposed at a position offset to the rearward direction from the center position in the frontward/rearward direction of the first link member.

3. The pillow according to claim 2, wherein the front end portion of the first link member of each X-shaped link is positioned frontward than the front end portion of the second link member.

4. The pillow according to claim 1, wherein the spring member is composed of a plurality of tension springs which are laterally spaced apart and stretched across the front-side upper connecting member and the rear-side upper connecting member.

5. The pillow according to claim 1, wherein the biasing mechanism is designed so that during depression of the head placement member, the vertical positional relationship between a line of action of the spring force of the spring member and the pivotable connecting portion of the link members of each X-shaped link is reversed so that the X-shaped links are biased

toward the lower contracting direction by the spring member, and further comprising a second spring member for re-reversing the vertical positional relationship between the line of action of the spring force of the spring member and the pivotable connecting portion by biasing the X-shaped links toward the upper expanding direction resisting against the biasing force of the spring member.

6. The pillow according to claim 5, further comprising a rear-side lower connecting member for connecting the rear end portions of the first link members of the X-shaped links, a front-side lower connecting member for connecting the front end portions of the second link members of the X-shaped links, an upper tension spring stretched across the front-side upper connecting member and the rear-side upper connecting member, and a lower tension spring stretched across the front-side lower connecting member and the rear-side lower connecting member, wherein the spring member is composed of one of either the upper tension spring or the lower tension spring, and the second spring member is composed of the other tension spring.

7. The pillow according to claim 6, wherein at least one connecting member out of the front-side upper connecting member, the rear-side upper connecting member, the front-side lower connecting member and the rear-side lower connecting member is formed of a shaft-like member capable of being rotated for

adjustment, and an end portion of the corresponding tension spring out of the upper and lower tension springs is wound around and fixed to the shaft-like member.

8. The pillow according to claim 1, further comprising at least one of a rear-side lower connecting member for connecting the rear end portions of the first link members of the X-shaped links and a front-side lower connecting member for connecting the front end portions of the second link members of the X-shaped links, and having a flexible bridging member stretched across the lower connecting member and the front-side or rear-side upper connecting member on the same side as the lower connecting member, wherein one connecting member out of the lower connecting member and the upper connecting member is formed of a shaft-like member capable of being rotated for adjustment, and an end portion of the bridging member is wound around and fixed to the shaft-like member.

9. A pillow according to claim 7 or claim 8, wherein a tool inserting hole that opens toward an end portion of the shaft-like member is formed to the head placement member.

10. A pillow according to claim 1, wherein the biasing mechanism is covered with a stretchable tube-like cover.

11. A pillow according to claim 1, wherein the size of the

hollow portion is designed so as to ensure a clearance between the surface of the head placement member and the ears of a user when the head placement member is depressed by the load of the head of a user in a face-up lying position.

12. A pillow according to claim 1, wherein the head placement member is formed of a molded member made of soft resin.

13. A pillow according to claim 12, wherein a communication hole for communicating the hollow portion with the exterior is formed on the upper area of the hollow portion of the head placement member.

14. A pillow according to claim 12, wherein the wall on a front side of the hollow portion is formed so that the cross-sectional shape thereof in the vertical direction during non-depressed state of the head placement member is arced to project toward the front direction.

15. A pillow according to claim 12, wherein the soft resin is a low repulsion urethane foam, and a backing panel formed of an elastic member that is harder than the low repulsion urethane foam is laminated on a ceiling surface of the hollow portion of the head placement member.

16. A pillow according to claim 1, wherein the head placement

member is composed of a bag-like body filled with at least one material selected from a group consisting of feather, natural fiber, synthetic fiber, inorganic particles, organic particles and fluid.